

Candidate Information

Position: Research Fellow in Edge or Fog Computing **School/Department:** Centre for Data Science and Scalable Computing

Reference: 20/108170

Closing Date: Tuesday 30 June 2020

Salary: £33,797 to £40,322 per annum

Anticipated Interview Date: Tuesday 30 June 2020 Duration: 36 Months

JOB PURPOSE:

To be an active member of the Edge Computing Hub funded by Rakuten Mobile, Japan by: (i) conducting research in tackling system-oriented challenges of Edge or Fog computing, (ii) assisting in the development of research proposals, (iii) contributing to the supervision of research students, and (iv) planning and delivering the research activity to meet relevant objectives of the Edge Computing Hub and performance indicators set by the funder.

MAJOR DUTIES:

- 1. Develop and plan an area of personal research and expertise relevant to the Edge Computing Hub and collaboratively work with other team members and stakeholders.
- 2. Actively contribute to the general planning and delivery of the overall research activities of the Edge Computing Hub.
- 3. Present regular progress reports on research to internal and external audiences to disseminate and publicise research findings.
- 4. Prepare, in consultation with the Principal Investigator, material for publication in reputed journals (for example, IEEE TPDS, ACM TIOT, FGCS) and conferences (for example, IEEE EDGE, IEEE CLOUD, ACM/IEEE SEC).
- 5. Assist in the preparation of funding proposals and applications to external bodies
- 6. Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
- 7. Contribute to the supervision of PhD candidates and carry out occasional undergraduate/postgraduate project supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
- 8. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.
- 9. Any other duties that may reasonably be requested by the Principal Investigator.

Planning and Organising:

- 1. Plan for specific aspects of research programmes. Timescales range from 1-6 months in advance and contribute to research group planning.
- 2. Plan for the use of research resources, laboratories and workshops where appropriate.
- 3. Plan own day-to day activity within framework of the agreed research programme.
- 4. Plan up to a year in advance to meet deadlines for journal publications and to prepare presentations and papers for conferences.
- 5. Coordinate and liaise with other members of the research group and the Rakuten Mobile team in Japan over work progress.

Resource Management Responsibilities:

- 1. Ensure research resources are used in an effective and efficient manner
- 2. Provide guidance as required to support staff and any students who may be assisting with research.

Internal and External Relationships:

1. Liaise on a regular basis with Rakuten Mobile, Japan, to develop research.

- 2. Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
- 3. Join external networks to share information and ideas.
- 4. Contribute to the School's outreach programme by establishing links with local community groups, industries etc.

ESSENTIAL CRITERIA:

- Degree in Computer Science (or related discipline).
- 2. Have, or be about to obtain a relevant PhD.
- 3. At least 3 years' relevant research experience in parallel and distributed systems, including Cloud and Fog/Edge computing.
- 4. Evidence of a strong publication record commensurate with career stage and experience.
- 5. Ability to contribute to broader management and administrative processes.
- 6. Contribute to the School's outreach programme by links with industry, community groups etc.
- 7. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
- 8. Good written and verbal communication skills with an ability to communicate complex information clearly.
- 9. Ability to innovate and rapidly contribute to research projects.
- 10. Ability to assess and organise resources.
- 11. Ability to meet the mobility requirements of the post, in particular a willingness to travel both within the UK and outside for collaborative visits, attending and presenting at conferences.

DESIRABLE CRITERIA:

- 1. A strong background in Computer Science or Computer Engineering; for example, a first class undergraduate (including integrated Masters) degree or MSc distinction (or international equivalent).
- 2. Demonstrable expertise in developing end-to-end scalable, adaptive or trustworthy approaches for problems in distributed systems.
- 3. Experience with grant application writing.
- 4. Industry experience.
- 5. Any experience contributing to student project supervision.
- 6. Ability to build contacts and participate in internal and external networks.
- 7. Experience of collaborative research or working in a team.